AMENDMENTS TO THE CLAIMS

1. (Withdrawn) A rubber-reinforced structure which comprises at least one resin member comprising a resin composition, and at least one rubber layer or rubber member being directly bonded to the resin member without any adhesive, wherein the resin member and the rubber layer or rubber member form a tire, the rubber layer or rubber member comprises a rubber composition vulcanized with a radical-generating agent, the resin member comprises a thermoplastic resin having at least two active atoms on the average per molecule, and each of the atoms is selected from the group consisting of a hydrogen atom and a sulfur atom and has an orbital interaction energy coefficient S of not less than 0.006,

wherein the orbital interaction energy coefficient S is represented by the following formula (1):

$$S=(C_{HOMO,n})^2/|E_c-E_{HOMO,n}|+(C_{LUMO,n})^2/|E_c-E_{LUMO,n}| \quad (1)$$

in the formula, each of factors, E_c, $C_{HOMO,n}$, $E_{HOMO,n}$, $C_{LUMO,n}$, and $E_{LUMO,n}$ represents a value calculated by a semiempirical molecular orbital method MOPACPM3, E_c representing an orbital energy (eV) of a radical of the radical-generating agent as a vulcanizing agent, $C_{HOMO,n}$ representing a molecular-orbital coefficient of the highest occupied molecular orbital (HOMO) of an n-th active atom constituting a basic unit of the thermoplastic resin, $E_{HOMO,n}$ representing an orbital energy (eV) of the HOMO, $C_{LUMO,n}$ representing a molecular-orbital coefficient of the lowest unoccupied molecular orbital (LUMO) of the n-th active atom

constituting the basic unit of the thermoplastic resin, and $E_{LUMO,n}$ representing an orbital energy (eV) of the LUMO.

2. (**Currently amended**) A ~~rubber-reinforced structure~~ tire which comprises: ~~at least one resin member comprising a resin composition~~

a tire body comprising a rubber layer;

a reinforcing layer formed on the internal surface of the tire body and comprising a resin layer[[,]]; and ~~at least one rubber member~~

the tire body being directly bonded to the ~~resin member~~ reinforcing layer without any adhesive,

wherein ~~the resin member and the rubber member form a tire,~~ the rubber ~~member~~ layer comprises a rubber composition vulcanized with a sulfur-containing vulcanizing agent or a radical-generating agent, and the resin ~~member~~ layer comprises a polyamide resin ~~at least one member selected from the group consisting of a thermoplastic resin and a resin having a crosslinkable group~~.

3. (Withdrawn) A rubber-reinforced structure according to claim 2, wherein the rubber member comprises a styrene-diene-series rubber composition vulcanized with a sulfur-containing vulcanizing agent or a rubber composition vulcanized with a radical-generating agent, and the resin member comprises a polyphenylene ether-series resin composition.

4. (**Canceled**)

5. **(Currently amended)** A ~~rubber-reinforced structure~~ tire according to ~~any one of claims 1 to 3~~ claim 2, wherein the resin ~~member~~ layer forms an adhesive layer to at least one rubber layer ~~or rubber member~~ constituting the tire.

6. **(Currently amended)** A ~~rubber-reinforced structure~~ tire according to ~~any one of claims 1 to 3~~ claim 2, wherein the ~~resin member~~ reinforcing layer is bonded to the ~~rubber member~~ the tire body through a vulcanized rubber layer vulcanized with a vulcanizing agent.

7. **(Canceled)**

8. **(Currently amended)** A ~~rubber-reinforced structure~~ tire according to ~~any one of claims 1 to 3~~ claim 2, wherein the ~~thermoplastic~~ polyamide resin comprises ~~at least one member selected from the group consisting of~~ an aliphatic polyamide-series resin~~, an aromatic polyester-series resin, a polyacetal-series resin, a polyphenylene ether-series resin, a polysulfide-series resin, a polyurethane-series resin, a polyolefinic resin, a polyamide-series elastomer, a polyester-series elastomer, a polyurethane-series elastomer, a polystyrenic elastomer, and a polyolefinic elastomer~~.

9. (Withdrawn) A rubber-reinforced structure according to claim 2, wherein the resin having a crosslinkable group comprises at least one member selected from the group consisting of a thermosetting resin, and a thermoplastic resin having an unsaturated bond.

10. (Withdrawn) A rubber-reinforced structure according to any one of claims 1 to 3, wherein the rubber vulcanizable with the radical-generating agent comprises at least one member selected from the group consisting of a diene-series rubber, an olefinic rubber, an acrylic rubber, a fluorine-containing rubber, a silicone-series rubber, and a urethane-series rubber.

11. (Withdrawn) A rubber-reinforced structure according to any one of claims 1 to 3, wherein the radical-generating agent comprises at least one member selected from the group consisting of an organic peroxide, an azo compound, and a sulfur-containing organic compound.

12. **(Currently amended)** A ~~rubber-reinforced structure~~ tire according to ~~claim 1 or 2~~ claim 2, wherein at least one member selected from the group consisting of the rubber ~~member~~ layer and the resin ~~member~~ layer is formed from a composition containing a vulcanization-activating agent.

13. **(Currently amended)** A ~~rubber-reinforced structure~~ tire according to claim 12, wherein the vulcanization-activating agent has a plurality of polymerizable groups.

14. **(Currently amended)** A ~~rubber-reinforced structure~~ tire according to claim 12, wherein the amount of the vulcanization-activating agent is 0.1 to 10 parts by weight relative to 100 parts by weight of the rubber or the resin.

15. (**Currently amended**) A ~~rubber-reinforced structure~~ tire according to claim 12, wherein the amount of the vulcanization-activating agent is not more than 2 parts by weight relative to 100 parts by weight of the rubber.

16-26. (**Canceled**)